

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

May 22, 2009

Board of Land  
and Natural Resources  
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National  
Monument Research Permit to Dr. Charles Littnan, National Marine Fisheries Service,  
Pacific Islands Fisheries Science Center, for Access to State Waters to Conduct Juvenile  
Hawaiian Monk Seal Survival-Enhancement Activities

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument research permit to Dr. Charles Littnan, Leader, Hawaiian Monk Seal Research Program, Pacific Islands Fisheries Science Center, pursuant § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The research permit, as described below, would allow entry and research activities to occur in the Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island
- French Frigate Shoals
- Laysan Island
- Lisianski Island, Neva Shoal
- Pearl and Hermes Atoll
- Kure Atoll

The activities covered under this permit would occur from June 1, 2009 through May 31, 2010.

The proposed activities are a renewal of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES

The applicant proposes efforts to help increase juvenile monk seal survival in the Northwestern Hawaiian Islands. These activities include

1. Feeding and treating prematurely weaned and other undernourished seals in a captive facility
2. Relocating weaned/juvenile seals to areas of potentially greater survival
3. Treating weaned/juvenile seals to decrease parasite loads

These activities focus on direct interventions with juvenile seals to improve their survival and thus better position the monk seal population for recovery in the future. Based on the applicant's past experience, scientific review, and detailed consultations with external specialists, these activities are among the general approaches identified as the interventions most likely to be successful.

Captive Feeding Program: The Hawaiian monk seal program would collect, as appropriate, juvenile seals (0-3 yrs old) to feed, treat, and protect in captivity. Selected seals would be those that are prematurely weaned, undernourished twins, or in such a condition that would otherwise perish.

Seals would be cared for in shore pens and transported to the Ford Island Research Facility in Honolulu with the intent to release them back to their natal site or Nihoa Island. This is dependant on the facility coming on-line in early 2010. If that does not occur, animals would not be brought back to Honolulu.

Protocols for captive care activities are included in F-1c.

Translocation: One method for improving survival is to move a seal from a site where survival is low to a second site where survival is high, either with or without an intervening period of captive care. Necker (Mokumanamana) and Nihoa Islands may prove to be suitable for release of seals, as beach surveys suggest that seal numbers are increasing at these two islands. Furthermore, length and girth at weaning are higher at these two sites relative to the rest of the NWHI. These are both strong indicators that ample food resources exist in the area around the islands.

The applicant proposes to relocate six weaned seals from FFS to Nihoa Island. Seals that are selected would undergo full biomedical sampling (blood, skin, fecal, blubber) and would be instrumented with a satellite tag for post-release monitoring.

Protocols for capture and translocation are attached. See F-1d.

Worming Trial: Monk seals are known to host a variety of gastrointestinal parasites, and it has been noted that young seals infected with *Dipyllobothrium* spp. (tape worms) tend to be in poorer body condition than those uninfected. While parasites are likely not a primary cause of mortality in monk seals, they may further compromise animals already in ill health due to food limitation, thereby increasing their likelihood of dying.

The applicant proposes to conduct a study to evaluate the efficacy of anti-helminth treatment as a method to improve juvenile survival. This study would focus on seals at Laysan, Lisianski, and French Frigate Shoals. The objective would be to include all

available candidate seals in the study, which are likely to be a maximum of 41, 29, and 47 seals on each island respectively. Candidate seals are those that fall in the target age class of 0-2 years.

All study subjects would be captured by hand and net, sedated, and feces collected for subsequent determination of parasite burden, measured, tagged if necessary, and released. Half of the subjects (15 seals) would be given an oral dose of praziquantal (Droncit, Bayer) and fenbendazole (Panacur). Seals would be recaptured at periodic intervals for morphological assessment (weight and measurements), up to 4 times per year.

All interaction and take of Hawaiian monk seals would be in accordance with procedures delineated in permits issued by the NMFS Office of Protected Resources.

These activities would determine effective methods to aid in the recovery of endangered Hawaiian monk seals and this maintain biodiversity within the Monument. As such, the activities directly support the Monument Management Plan's action plan 3.2.1 – Threatened and Endangered Species (through strategy TES-1: Support activities that advance recovery of the Hawaiian monk seal).

The activities described above may require the following regulated activities to occur in State waters:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving monument resource
- ☒ Anchoring a vessel

#### REVIEW PROCESS:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 11th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

#### **Comments received from the scientific community are summarized as follows:**

Scientific reviews support the acceptance of this application. No concerns were raised.

#### **Comments received from the Native Hawaiian community are summarized as follows:**

Cultural reviews support the acceptance of this application. No concerns were raised.

#### **Comments received from the public are summarized as follows:**

No comments were received from the public on this application.

**Additional reviews and permit history:**

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐  
If so, please list or explain:

- All activities, except the worming trials, are currently authorized under Scientific Research and Enhancement Permit No. 848-1695-03, issued by the Office of Protected Resources, National Marine Fisheries Service.
- An additional MMPA/ESA permit is being issued for the proposed worming trials. Worming trials are not authorized until that permit is finalized.

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐  
If so, please summarize past permits:

- The Applicant has been granted several monk seal related Monument permits, including PMNM-2008-043 for similar activities last year.

Have there been any a) violations: Yes ☐ No ☒  
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

**STAFF OPINION:**

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for his application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with the following special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Research Permit General Conditions. The following special conditions have been vetted through the legal counsel of the Co-Trustee agencies.

1. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
2. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.

3. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocols attached to this permit.
4. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
5. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge
6. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

MONUMENT MANAGEMENT BOARD OPINION:

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity, conditional on development of a peer-reviewed Monument transport protocol, may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

RECOMMENDATION:

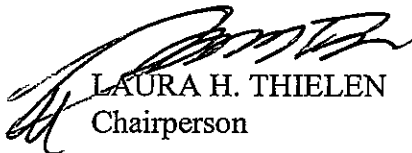
"That the Board authorize and approve, with stated conditions, a Research Permit to Dr. Charles Littnan, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service."

Respectfully submitted,



DAN POLHEMUS  
Administrator

APPROVED FOR SUBMITTAL



LAURA H. THIELEN  
Chairperson

